Client Code: CALTE.009A	RECORDA	12-09-2002		
12-9-02				
TO THE ASSISTANT COMMISSIONER FO	R PATENTS	102305040 r copy thereof.		
Name of conveying party(ies): (If multiple numerically)	e assignors, list	2. Name and address of receiving party(ies):		
1. David Baltimore, 2. Elizabeth J. Hong, 3. Carlos Lois-Caballe, 4. Shirley Pease Additional name(s) of conveying party(ies) attached? () Yes (X) No		Name: California Institute of Technology Internal Address: 1200 E. California Boulevard, M/S 201-85 Street Address: Same as above City: Pasadena State: CA ZIP: 91125		
		Additional name(s) of receiving party(ies) attached? () Yes (X) No		
3. Nature of conveyance:		4. Application number(s) or Patent number(s):		
(X) Assignment		() Application(s) filed herewith Execution Date(s):		
() Merger() Security Agreement() Change of Name() Other:		(X) Patent Application No.: 10/243,820 Filing Date: September 13, 2002		
Execution Date: 1. 11/10/02, 2. 11/25/02, 3. 11/02/02, 4. 10/31	/02	() Patent No.: Issue Date:		
		Additional numbers attached? () Yes (X) No		
5. Name and address of party to whom correspondence concerning document should be mailed: Name: Ginger R. Dreger KNOBBE, MARTENS, OLSON & BEAR, LLP Customer No. 20,995 Internal Address: Fourteenth Floor Street Address: 2040 Main Street		(X) Enclosed (X) Authorized to be charged to deposit account if any additional fees are required, or to credit any overpayment		
City: Irvine State: CA ZIP: 92614 Attorney's Docket No.: CALTE.006A		 Deposit account number: 11-1410 Please charge this account for any additional fees which may be required, or credit any overpayment to this account. 		
6. Total number of applications and patents	involved: 1			
9. Statement and signature.				
To the best of my knowledge and belief, original document.	the foregoing information	on is true and correct, and any attached copy is a true copy of the		
Ginger R. Dreger Name of Person Signing Sign	aurico (m.)	Date Decembes 4, 200)		
33,055 Registration No.				
Total number of pages including cover sheet,	attachments and docume	nent: 5		
Mail documents to be recorded with required of	cover sheet information	i to:		
2002 TDIAZ1 00000018 10243820 8021 40.00 UD	Attn: Assi Crysta	nd Trademark Office ignment Division al Gateway-4		
		avis Highway, Suite 320 on, VA 22202		

W:\DOCS\ANM\ANM-4297.DOC 120302

PATENT REEL: 13545 FRAME: 0919

Application No.: 10/243,820 Client Code: CALTE.009A Filing Date: September 13, 2002 Page 1

ASSIGNMENT

WHEREAS, We, David Baltimore, a U.S. citizen, residing at 415 S. Hill Avenue, Pasadena, CA 91106, Elizabeth J. Hong, a U.S. citizen, residing at 309 Barrington Drive, Bridgewater, NJ 08807, Carlos Lois-Caballe, a citizen of Spain, residing at 1821 1/2 Wayne Avenue, South Pasadena, CA 91030 and Shirley Pease, a citizen of the United Kingdom, residing at 341 Hill Street, Monrovia, CA 91061, have invented certain new and useful improvements in a METHOD FOR PRODUCING TRANSGENIC BIRDS AND FISH for which we have filed an application for Letters Patent in the United States, 10/243,820;

AND WHEREAS, California Institute of Technology (hereinafter "ASSIGNEE"), a CA Corporation, with its principal place of business at 1200 E. California Boulevard, M/S 201-85, Pasadena, CA 91125, desires to acquire the entire right, title, and interest in and to the said improvements and the said Application:

NOW, THEREFORE, in return for good and valuable consideration, the receipt of which is hereby acknowledged, we, the said inventors, do hereby acknowledge that we have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, the entire right, title, and interest throughout the world in, to and under the said improvements, and the said application and all provisional applications relating thereto, and all divisions, renewals and continuations thereof, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof, and all rights of priority under International Conventions and applications for Letters Patent which may hereafter be filed for said improvements in any country or countries foreign to the United States, and all Letters Patent which may be granted for said improvements in any country or countries foreign to the United States and all extensions, renewals and reissues thereof; and we hereby authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said improvements to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said improvements, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing and reissue applications, make all rightful oaths and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said improvements in all countries.

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this					
DESALC.					
David Baltimore					
IN TESTIMONY WHEREOF, I hereunto set my hand and seal thisday of, 20					
Elizabeth J. Hong					
IN TESTIMONY WHEREOF, I hereunto set my hand and seal this day of, 20					
Carlos Lois-Caballe					
IN TESTIMONY WHEREOF, I hereunto set my hand and seal this day of, 20					
Shirley Pease					

W:\DOCS\ANM\ANM-3998.DOC 101402

Application No.: 10/243,820 Filing Date: September 13, 2002

Client Code: CALTE.009A

Page 1

ASSIGNMENT

WHEREAS, We, David Baltimore, a U.S. citizen, residing at 415 S. Hill Avenue, Pasadena, CA 91106, Elizabeth J. Hong, a U.S. citizen, residing at 309 Barrington Drive, Bridgewater, NJ 08807, Carlos Lois-Caballe, a citizen of Spain, residing at 1821 1/2 Wayne Avenue, South Pasadena, CA 91030 and Shirley Pease, a citizen of the United Kingdom, residing at 341 Hill Street, Monrovia, CA 91061, have invented certain new and useful improvements in a METHOD FOR PRODUCING TRANSGENIC BIRDS AND FISH for which we have filed an application for Letters Patent in the United States, 10/243,820;

AND WHEREAS, California Institute of Technology (hereinafter "ASSIGNEE"), a CA Corporation, with its principal place of business at 1200 E. California Boulevard, M/S 201-85, Pasadena, CA 91125, desires to acquire the entire right, title, and interest in and to the said improvements and the said Application:

NOW, THEREFORE, in return for good and valuable consideration, the receipt of which is hereby acknowledged, we, the said inventors, do hereby acknowledge that we have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, the entire right, title, and interest throughout the world in, to and under the said improvements, and the said application and all provisional applications relating thereto, and all divisions, renewals and continuations thereof, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof, and all rights of priority under International Conventions and applications for Letters Patent which may hereafter be filed for said improvements in any country or countries foreign to the United States, and all Letters Patent which may be granted for said improvements in any country or countries foreign to the United States and all extensions, renewals and reissues thereof; and we hereby authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said improvements to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said improvements, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing and reissue applications, make all rightful oaths and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said improvements in all countries.

IN TESTIMONY WHEREOF, I hereunto set my hand	d and seal this	_ day of	, 20
	David Baltimore		
IN TESTIMONY WHEREOF, I hereunto set my hand	d and seal this 25 ^r	day of November	_, 20 <u>0</u> 2
	Elizabeth 1	- Hart	
	Elizabeth J. Hong		
IN TESTIMONY WHEREOF, I hereunto set my hand	d and seal this	day of	, 20
	<u> </u>		
	Carlos Lois-Caballe	•	
IN TESTIMONY WHEREOF, I hereunto set my hand	d and seal this	_ day of	, 20
	Shirley Pease		
	Simile A 1 case		

W:\DOCS\ANM\ANM-3998.DOC 101402

Application No.: 10/243,820 Client Code: CALTE.009A Filing Date: September 13, 2002 Page 1

ASSIGNMENT

WHEREAS, We, David Baltimore, a U.S. citizen, residing at 415 S. Hill Avenue, Pasadena, CA 91106, Elizabeth J. Hong, a U.S. citizen, residing at 309 Barrington Drive, Bridgewater, NJ 08807, Carlos Lois-Caballe, a citizen of Spain, residing at 1821 1/2 Wayne Avenue, South Pasadena, CA 91030 and Shirley Pease, a citizen of the United Kingdom, residing at 341 Hill Street, Monrovia, CA 91061, have invented certain new and useful improvements in a METHOD FOR PRODUCING TRANSGENIC BIRDS AND FISH for which we have filed an application for Letters Patent in the United States, 10/243,820;

AND WHEREAS, California Institute of Technology (hereinafter "ASSIGNEE"), a CA Corporation, with its principal place of business at 1200 E. California Boulevard, M/S 201-85, Pasadena, CA 91125, desires to acquire the entire right, title, and interest in and to the said improvements and the said Application:

NOW, THEREFORE, in return for good and valuable consideration, the receipt of which is hereby acknowledged, we, the said inventors, do hereby acknowledge that we have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, the entire right, title, and interest throughout the world in, to and under the said improvements, and the said application and all provisional applications relating thereto, and all divisions, renewals and continuations thereof, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof, and all rights of priority under International Conventions and applications for Letters Patent which may hereafter be filed for said improvements in any country or countries foreign to the United States, and all Letters Patent which may be granted for said improvements in any country or countries foreign to the United States and all extensions, renewals and reissues thereof; and we hereby authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said improvements to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said improvements, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing and reissue applications, make all rightful oaths and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said improvements in all countries.

IN TESTIMONY WHEREOF, I hereunto set my hand and seal	l this day of	, 20
David Ba	altimore	
IN TESTIMONY WHEREOF, I hereunto set my hand and seal	I this day of	, 20
Elizabeth	h J. Hong	
IN TESTIMONY WHEREOF, I hereunto set my hand and seal		ember, 2002
	38 (.101)	
Carlos L	ois-Caballe	
IN TESTIMONY WHEREOF, I hereunto set my hand and seal	l this day of	, 20
Shirley P	Pease	

W:\DOCS\ANM\ANM-3998.DOC 101402

Application No.: 10/243,820 Client Code: CALTE.009A Filing Date: September 13, 2002 Page 1

ASSIGNMENT

WHEREAS, We, David Baltimore, a U.S. citizen, residing at 415 S. Hill Avenue, Pasadena, CA 91106, Elizabeth J. Hong, a U.S. citizen, residing at 309 Barrington Drive, Bridgewater, NJ 08807, Carlos Lois-Caballe, a citizen of Spain, residing at 1821 1/2 Wayne Avenue, South Pasadena, CA 91030 and Shirley Pease, a citizen of the United Kingdom, residing at 341 Hill Street, Monrovia, CA 91061, have invented certain new and useful improvements in a METHOD FOR PRODUCING TRANSGENIC BIRDS AND FISH for which we have filed an application for Letters Patent in the United States, 10/243,820;

AND WHEREAS, California Institute of Technology (hereinafter "ASSIGNEE"), a CA Corporation, with its principal place of business at 1200 E. California Boulevard, M/S 201-85, Pasadena, CA 91125, desires to acquire the entire right, title, and interest in and to the said improvements and the said Application:

NOW, THEREFORE, in return for good and valuable consideration, the receipt of which is hereby acknowledged, we, the said inventors, do hereby acknowledge that we have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, the entire right, title, and interest throughout the world in, to and under the said improvements, and the said application and all provisional applications relating thereto, and all divisions, renewals and continuations thereof, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof, and all rights of priority under International Conventions and applications for Letters Patent which may hereafter be filed for said improvements in any country or countries foreign to the United States, and all Letters Patent which may be granted for said improvements in any country or countries foreign to the United States and all extensions, renewals and reissues thereof; and we hereby authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said improvements to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said improvements, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing and reissue applications, make all rightful oaths and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said improvements in all countries.

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this		_ day of	_, 20
	David Baltimore		
IN TESTIMONY WHEREOF, I hereunto set my hand	d and seal this	day of	_, 20
	Elizabeth J. Hong		
IN TESTIMONY WHEREOF, I hereunto set my hand	d and seal this	_ day of	_, 20
	Carlos Lois-Caballe	2	
IN TESTIMONY WHEREOF, I hereunto set my hand	d and seal this 3)	day of Callow	<u>چن 20</u>
	Shirting Pear	1.	
	Shirley Pease		

W:\DOCS\ANM\ANM-3998.DOC 101402

RECORDED: 12/09/2002

PATENT REEL: 13545 FRAME: 0923